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1915.

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4-*o*-, *m*-, and *p*-Tolueneazo-1-naphthylamine, salts of (CASALE and CASALE-SACCHI), A., i, 724.

***p*-Tolueneazophenol**, benzoate of (MCPHERSON and STRATTON), A., i, 467.

***p*-Tolueneazothymol**, and its benzoate (MCPHERSON and STRATTON), A., i, 467.

2′:4:*o*-Tolueneazo-*o*-tolueneazo-1′-naphthylamine, and its chloroacetyl derivative (JACOBS and HEIDELBERGER), A., i, 670.

***p*-Tolueneoxyphosphazobenzene** (MICHAELIS, v. GAZA, and REHSE), A., i, 330.

***p*-Toluenesulphinic acid**, 3-nitro-(ZINCKE and RÖSE), A., i, 234.

***p*-Toluenesulphonamide**, metallic salts of (FRANKLIN), A., i, 951.

Toluene-4-sulphonic acid, 6-bromo-3-hydroxy-, 6-chloro-3-hydroxy-, and their salts (v. WALTHER and DEMMELMEYER), A., i, 879.

2-chloro-, preparation of (FARBWERKE VORM. MEISTER, LUCIUS, & BRÜNING), A., i, 793.

***p*-Toluenesulphonylalanine**, externally compensated, resolution of (GIBSON and SIMONSEN), T., 798; A., i, 801.

***p*-Toluenesulphonyl-amide, -anilide**, and **-chloride**, 3-nitro- (ZINCKE and RÖSE), A., i, 236.

***p*-Toluenesulphonyl-*d*-phenylalanine** (FISCHER), A., i, 138.

β-*p*-Toluenesulphonylpropenylamidoxime (TROEGER and WUNDERLICH), A., i, 793.

α-*p*-Toluenesulphonyl-propionamide, -propionitrile, and **-propionthioamide** (TROEGER and WUNDERLICH), A., i, 792.

***O*-*p*-Toluenesulphonyl-*l*-tyrosine** (FISCHER), A., i, 138.

Toluic acid, *m*-amino-, *N*-chloro-, and *N*-iodo-acetyl derivatives of (JACOBS and HEIDELBERGER), A., i, 667, 804.

hydroxy-, titanium salt (ROSENHEIM, SCHNABEL, and BILECKI), A., i, 538.

***o*-Toluic acid**, 3- and 5-nitro-, and their salts and derivatives (MAYER), A., i, 958.

***m*-Toluic acid**, ammonium salt (MCMASTER and GODLOVE), A., i, 958.

Toluene compounds, Me = 1.

p-**Toluic acid**, 6-bromo-3-hydroxy-, and 6-chloro-3-hydroxy-, salts and derivatives of (v. WALTHER and ZIPPER), A., i, 805.

6-chloro-3-hydroxy- (RIEDEL), A., i, 16.

3-hydroxy-, preparation of 6-halogen derivatives of (RIEDEL), A., i, 16.

Toluic acids, absorption spectra of (PURVIS), T., 969.

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Toluic acids, *o*- and *p*-hydroxy-, methyl esters, action of magnesium organic compounds on (BERLITZER), A., i, 533.

Toluidines, 2:3:4- and 2:4:5-*tri*nitro- (GINA), A., i, 886.

Toluidinoacetic acids, amino-, and nitro-, and their salts and derivatives (POLLAK), A., i, 800.

ω-*o*-**Toluidinoacetophenone**, *N*-bromo-a-etyl derivative (JACOBS and HEIDELBERGER), A., i, 668.

Toluidinotolylphosphinic acid, ethyl ester (MICHAELIS, v. GAZA, and REHSE), A., i, 330.

1- and **2**-*p*-**Toluoylanthraquinones** and 1-chloro-derivative of the latter (SCHAARSCHMIDT), A., i, 566.

o-**Toluoylbenzanilide** (MUMM, HESSE, and VOLQUARTZ), A., i, 245.

o-**Toluoylbenzoic acid**, 2:4-*di*hydroxy- (COHN), A., i, 402.

α-*m*-, and -*p*-**Toluoylmethylaminoisobutyric acids**, and their nitriles (IMMENDÖRFER), A., i, 583.

γ-*m*-, and -*p*-**Toluoylmethylamino-*β*-keto-*γ*-methylbutanedicarboxylic acids**, methyl esters (IMMENDÖRFER), A., i, 583.

ω-*m*-**Toluoyl-*m*-toluic acid**, and its silver salt (ZALKIND and SCHMIDT), A., i, 408.

Toluquinone, compounds of, with aminobenzoic acids (SUCHANEK), A., i, 269.

2:5-Toluquinone-α-benzoyl-*p*-tolylhydrazone (MCPHERSON and STRATTON), A., i, 467.

o-**Toluylideneanthranilic acid** (EKELEY and POE), A., i, 166.

o-**Tolyl** *β*-aminoethyl ether, and its derivatives (JACOBS and HEIDELBERGER), A., i, 777.

methyl ether, and 3-amino-, and their derivatives (SIMONSEN and NAYAK), T., 828; A., i, 807.

m-**Tolyl** carbonates, 6-bromo- and 6-chloro- (v. WALTHER and DEMMELMEYER), A., i, 879.

methyl ether, 6-nitro-4-hydroxy-, and its acetyl derivative (CARDWELL and ROBINSON), T., 251; A., i, 134.

Toluene compounds, Me = 1.

m- and *p*-**Tolyl** *β*-bromoethyl ether, and *tri*- and *tetra*-bromo-, and their hexamethylenetetramine compounds (JACOBS and HEIDELBERGER), A., i, 802.

p-**Tolyl** α-2-aminonaphthyl sulphide, 3-nitro-, and its derivatives (ZINCKE and RÖSE), A., i, 235.

ethyl sulphide, 3-nitro- (ZINCKE and RÖSE), A., i, 236.

hydroxynaphthyl sulphides, 3-nitro-, and their acetyl derivatives (ZINCKE and RÖSE), A., i, 235.

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thiocyanate, 3-nitro (ZINCKE and RÖSE), A., i, 234.

m-**Tolylacetaldehyde** (SPÄTH), A., i, 263.

p-**Tolylacetyl** chloride (STOERMER and BARTHELMES), A., i, 152.

p-**Tolylaldehydesemicarbazone** hydrochloride (HENDERSON and HEILBRON), T., 1746.

p-**Tolylaldoximinoacetic acid** (COHN), A., i, 401.

p-**Tolyl-*p*-anisylhydrazine** (WIELAND, REVERDY, and HEINEMANN), A, i, 851.

o-**Tolylarsinic acid**, 4-chloro-, and 3:5-*di*nitro-4-hydroxy- (KARRER), A., i, 333.

p-**Tolyl benzyl ketone**, preparation of (TURNER), T., 1462; A., i, 1063.

p-**Tolyl bromomethyl ketone**, and 3-amino-, acetyl derivative, and their hexamethylenetetramine compounds (JACOBS and HEIDELBERGER), A., i, 819.

p-**Tolyldiacetonamine** (EVENS, GIFFORD, and GRIFFITHS), T., 1674.

m-**Tolyldibenzylcarbinol**, 2- and 4-hydroxy- (BERLITZER), A., i, 534.

β-*o*- and -*m*-**Tolyl-αγ-di-*o*-carboxyphenylpropane**, *β*-hydroxy-, and their derivatives (ZALKIND and SCHMIDT), A., i, 408.

m-**Tolyldiethylcarbinol**, 2- and 4-hydroxy- (BERLITZER), A., i, 533.

m-**Tolyldi-α-naphthylcarbinol**, 2- and 4-hydroxy- (BERLITZER), A., i, 534.

m-**Tolyldiphenylcarbinol**, 2- and 4-hydroxy- (BERLITZER), A., i, 534.

p-**Tolyl** *αβ*-**diphenylethyl ketone** (TURNER), T., 1464; A., i, 1063.

m-**Tolyldipropylcarbinol**, 2- and 4-hydroxy- (BERLITZER), A., i, 533.

β-*p*-**Tolylethylamine**, *β*-hydroxy-, and its *N*-chloroacetyl derivative (JACOBS and HEIDELBERGER), A., i, 779.

p-**Tolylethylsulphoxide**, 3-nitro- (ZINCKE and RÖSE), A., i, 236.

Toluene compounds, Me = 1.

β-*p*-Tolylglutaconic acid, 2:6-*di*hydroxy-, silver salt (DEY), T., 1637.

Tolylglycine. See Toluidinoacetic acid.

δ-*m*-Tolyl-Δγ-heptene, 2- and -4-hydroxy- (BERLITZER), A., i, 534.

Tolylhydrazine nitrates (CHARRIER), A., i, 907.

***p*-Tolyl β-iodomethyl ketone**, and 3-amino-, acetyl derivative, and their hexamethylenetetramine compounds (JACOBS and HEIDELBERGER), A., i, 819.

***m*-Tolylmethylcarbinol** (v. AUWERS), A., ii, 297.

***p*-Tolyl methyl diketone**, hydroxy-, β-oxime of (v. AUWERS), A., i, 441.

***o*-Tolyl methyl ketone**, 3:5-*di*hydroxy- (HOESCH), A., i, 821.

***p*-Tolylmethylsulphoxide**, 6-chloro-3-nitro-, iodonitro-, and 3-nitro- (ZINCKE and RÖSE), A., i, 236.

***m*-Tolyloxyacetic acid**, 6-bromo-, 6-bromo-4-nitro-, 6-chloro-, and 6-chloro-4-nitro-, and their salts and derivatives (v. WALTHER and DEMMELMEYER), A., i, 879.

1-α-*p*-Tolyloxy-*p*-aldehydobenzyl-3-naphthoic acid, 2-hydroxy-, methyl ester (LUGNER), A., i, 547.

β-*o*-Tolyloxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER), A., i, 802.

β-*p*-Tolyloxyethylpiperidine, *N-tri*bromo-, and its hydrobromide (JACOBS and HEIDELBERGER), A., i, 803.

β-*p*-Tolyloxyhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER), A., i, 803.

γ-*m*-Tolyl-Δβ-pentene, 2- and -4-hydroxy- (BERLITZER), A., i, 533.

***p*-Tolylphosphin-anilide-*p*-toluidide, -dianilide, -di-*p*-toluidide** (MICHAELIS, v. GAZA, and REHSE), A., i, 330.

***p*-Tolylphosphinic acid**, aniline hydrogen salt (MICHAELIS, v. GAZA, and REHSE), A., i, 330.

***m*-Tolyl *iso*propyl ketone**, 4-hydroxy-, and its methyl ether (v. AUWERS), A., ii, 297.

2-*p*-Tolylthiolanthraquinone, 1-cyano- (SCHAARSCHMIDT), A., i, 698.

4(*p*-Tolylthiol-β-naphthylaminothiol)-toluene, 3-nitro-4(α-3′-nitro-)- (ZINCKE and RÖSE), A., i, 235.

5-*m*- and *p*-Tolyl-1:2:2-trimethylpyrrolones, and their picrates (IMMENDÖRFER), A., i, 584.

Tomatoes, antioxydase in (LUBIMENKO), A., i, 488.

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Triacetoxydimethoxy*cyclo*hexanol (GRIFFIN and NELSON), A., i, 676.

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Triacetoxy*cyclo*hexanol, *di*bromo-, and *di*chloro- (GRIFFIN and NELSON), A., i, 675.

Triacetylgallic acid, preparation of esters of (FARBENFABRIKEN VORM. F. BAYER & Co), A., i, 682.

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Triazoles, preparation of (BRUNNER), A., i, 1007.

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Triazoquinol (OLIVERI-MANDALÀ and CALDERARO), A., i, 910; (OLIVERI-MANDALÀ), A., i, 1013.

Tributyrin, action of lipase of blood-serum on (PIETRI), A., i, 856.

Tricarbomethoxygalloylglycine. See 3:4:5-Trimethylcarbonatobenzoylaminoacetic acid.

3:5:7-Triethoxy-2-*mp*-diethoxyphenyl-4-ethylbenzopyran, and its derivatives (WATSON, SEN, and MEDHI), T., 1480; A., i, 1069.

3:5:7-Triethoxy-4-*o*-methoxyphenyl-2-*mp*-diethoxyphenyl-1:4-benzopyran, derivatives of (WATSON, SEN, and MEDHI), T., 1483; A., i, 1070.

3:5:7-Triethoxy-4-phenyl-2-*mp*-diethoxyphenyl-1:4-benzopyran anhydrohydrochloride (WATSON, SEN, and MEDHI), T., 1482; A., i, 1070.

Tri-9-ethylcarbazyldiphthalide (COPISAROW and WEIZMANN), T., 886; A., i, 687.

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2:4:5-Triketo-1:3-diphenylpyrrolidine (FIGEE), A., i, 870.
Triketohydrindene hydrate, toxic action of (LOEW), A., i, 634.
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3:5:7-Trimethoxy-2-*op*-dimethoxyphenyl-4-methyl-1:4-benzopyranol anhydrohydriodide (WATSON, SEN, and MEDHI), T., 1484 ; A., i, 1070.
3:4:5-Trimethoxyphenyl-ethyl- and -methyl-carbinols (MAUTHNER and SZÖNYI), A., i, 964.
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2:4:6-Trimethylbenzoylacetic acid, and its ethyl ester (WENZEL and HELLMANN), A., i, 541.
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2:4:5-Trimethylcoumarilic acid, and its silver salt (DEY), T., 1647.
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1:1:2-Trimethyl*cyclo*hexane-3:5-diol, and its dibenzoyl derivative (CROSSLEY and RENOUF), T., 607 ; A., i, 527.
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1:4:6-Trimethyl-2-pyridone-3-carboxylic acid, and its salts (SIMONSEN and NAYAK), T., 797; A., i, 837.

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1:3:5-Triphenyl-4-ethylpyrazole (MARSHALL), T., 520; A., i, 410.

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ERRATA.

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Page	Col.	Line	
ii, 911	ii.	18	*for* "**Hartley**, *Harold Brewer*," read "**Hartley**, *Harold*."

Vol. CVIII (Abstr., 1915).

Page	Line	
i, 190	11	*for* "Keetom" *read* "Keeton."
i, 193	6	,, "some" *read* "sour."
i, 193	8*	,, "360" *read* "361."
i, 346	13*	,, "Batelli" *read* "Battelli."
i, 472	3*	,, "Bronnenfenner" *read* "Bronfenbrenner."
i, 520	11*	,, "dibromo-" *read* "tribromo-."
i, 525	18	,, "Magnesium ethyl iodide" *read* "magnesium methyl iodide."
i, 562	9, 11	,, "α-bromo*iso*butyl" *read* "α-bromo*iso*butyryl."
i, 634	2	,, "Griebold" *read* "Griebel's."
i, 646	18, 21, 3*	,, "gynocardinic" *read* "gynocardic."
	22*, 8*	,, "*gynocardinate*" read "*gynocardate.*"
	5*	,, "hydroxygynocardinic" *read* "hydroxygynocardic."
i, 674	15*	*after* "1267" *insert* "; from *Öster. Chem. Zeit.*, 1914, **17**, 323—333."
i, 692	21*	,, "473" *insert* "; from *Philippine J. Sci.*, 1913, [A], **8**, 399—426."
i, 708	2*	,, "1456" *insert* "; from *Sitzungsber. Heidelberg. Akad. Wiss. Math. Naturw. Klasse.*, [A], 1914, 18."
i, 714	19*	,, "1165" *insert* "; from *Sitzungsber. Math. Naturwiss. Klasse, K. Akad. Wiss. Wien*, 1914, reprint."
i, 732	20	,, "1447" *insert* "; from *Apoth. Zeit.*, 1914, **29**, 887—890."
i, 739	15*	,, "1280" *insert* "; from *Zentr. Physiol.*, 1914, **28**, 617—619."
i, 743	16	,, "1074" *insert* "; from *Arch. Anat. Physiol., Physiol. Abt.*, 1914, 585—594."
i, 749	19	,, "1279" *insert* "; from *Zeitsch. exper. Path. Ther.*, 1914, **16**, 484—492."
i, 757	12	,, "1170" *insert* "; from *U.S. Dept. Agric. Bull.*, 270."
i, 760	17*	,, "1115" *insert* "; from *Zeitsch. ges. Brauwesen*, 1914, **37**, 430—432, 437—440."
ii, 251	7*	*for* "Henden" *read* "Hinden."
ii, 258	20	,, "maximum" *read* "minimum."
ii, 280	5	,, "not denied" *read* "denied."
ii, 357	14	,, "Wurtzite" *read* "Hauerite."
ii, 357	21	,, "V. J. Vernadski" *read* "V. I. Vernadski."
ii, 357	29	,, "**Grahnite**" *read* "**Gahnite.**"
ii, 452	8*	,, "Biol. Zentr." *read* "Bied. Zentr."

* From bottom.

ERRATA (*continued*).

	Page	Line	
ii,	497	12	*after* "1046" *insert* "; from *Photo. Rundschau*, 1914, Heft. 3."
ii,	554	2	,, "1220" *insert* "; from *Farb. Zeit.*, 1914, **25**, 343—345, 361—362."
ii,	557	17*	,, "1421" *insert* "; from *J. Gasbeleucht.*, 1914, **57**, 941—943."
ii,	559	15	,, "1379" *insert* "; from *J. Gasbeleucht.*, 1914, **57**, 733—740."
ii,	559	5*	,, "1380" *insert* "; from *J. Gasbeleucht.*, 1914, **57**, 757—765, 781—787, 805—810."
ii,	570	11*	,, "1082" *insert* "; from *Atti R. Accad. Sci., Napoli*, [xvi], **2***a*, No. 2."
ii,	573	13	*for* "an olive" *read* "a blue."
ii,	574	15*	,, "MISSON SERAING" *read* "MISSON."
ii,	574	13*	,, "benzene" *read* "light petroleum."
ii,	651	14*	,, "sodium" *read* "hydrogen."
ii,	651	4*	*after* "sulphate is" *insert* "neutralised and."
ii,	758	8*	*for* "molecular" *read* "unimolecular."
ii,	828	4	,, "VII" *read* "III."

* From bottom.